# Virginia Department of Health

## Public Health Emergency Response Plan

*Attachment 3*
*Severe Acute Respiratory Syndrome*

**June 27, 2003**

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

## Table of Contents

## I. Purpose

A single case of severe acute respiratory syndrome (SARS) would require an immediate and coordinated public health and medical response to contain the outbreak and prevent further infection of susceptible individuals. Priorities of the Virginia Department of Health (VDH) in anticipation of a possible SARS outbreak will include the dissemination of accurate and timely information to health care providers and the general public, surveillance and investigation of the disease, and the assured continuation and delivery of essential public health services. This plan addresses how to respond to specific situations, as they relate to SARS. This document will be periodically reviewed and updated to ensure that information contained within is consistent with current medical knowledge and the changing infrastructure of the Virginia Department of Health.

This plan for responding to SARS will serve as an attachment to the VDH Bioterrorism and Public Health Emergency Response Plan, which will address issues such as: command and control procedures, legal authority, surveillance and epidemiologic investigation procedures, medication and vaccine management, intra- and interagency coordination, hospital and emergency medical services coordination, infection control, security, communications, and education and training. While this attachment serves as a guide for specific SARS intervention activities, during an outbreak the judgment of public health leadership, based on knowledge of the specific virus, may alter the strategies that have been outlined.

For planning purposes, a single case of SARS in Virginia would be considered an outbreak and the appropriate procedures listed within this document for surveillance and investigation, specimen collection and submission, and infection control should be followed. Additional response measures, such as opening triage facilities and large-scale isolation and quarantine facilities, would be advised based on the extent of the outbreak and factors such as suspected mode of transmission (e.g., community transmission vs. exposure through recent travel to an area where SARS cases have been reported).

## II. Situation and Assumptions

Severe acute respiratory syndrome is a novel disease caused by a previously unrecognized coronavirus. Clinical recommendations, including those for diagnostic testing, treatment of patients, and infection control procedures are still being formulated. The following assumptions are based on information available to date. As more information about the cause, communicability, and transmission of this illness becomes available, the recommendations provided in this document may change. The following assumptions are made:

A. Incubation period is 2 to 10 days in duration.
B. Presentation is of a prodromal illness with symptoms including malaise, headache, or myalgia concurrent with or followed by onset of high fever.
C. Lower respiratory phase begins within 3-7 days after onset of prodrome.
D. Patients are communicable from the onset of symptoms to 10 days after resolution of fever and respiratory symptoms.
E. Transmission occurs through close contact with a symptomatic individual. Close contact means having cared for or lived with a person known to have SARS or having a high

likelihood of direct contact with respiratory secretions and/or body fluids of a patient known to have SARS.

F. Recent travel (within 10 days) to regions where SARS cases have been reported and close contact among household members and healthcare workers with SARS patients are the primary risk factors for acquiring SARS.
G. Close contact with a probable case is considered to be a higher risk of transmission compared to history of recent travel to an "affected area".
H. Current infection control measures, including the proper use of N-95 masks, are effective.
I. A SARS outbreak may stress the state's mental health system, producing a need for mental health counseling.
J. An outbreak of SARS will pose significant threats to human infrastructure responsible for critical community services (in health and non-health sectors) due to widespread absenteeism.
K. Effective preventive and therapeutic measures may be in short supply.
L. There may be critical shortages of health care resources such as staffed hospital beds, isolation rooms, mechanical ventilators, morgue capacity, temporary holding sites with refrigeration for storage of bodies, and other resources, such as isolation facilities for visitors, tourists and the homeless.
M. A SARS outbreak in Virginia will present a massive test of the emergency preparedness system. Advance planning for Virginia's emergency response could save lives and prevent substantial economic loss.
N. Many geographic areas within Virginia and its neighboring jurisdictions may be affected simultaneously. Coordination among all elements of VDH as well as inter- and intra-jurisdictional cooperation with emergency management partner agencies will be crucial.
O. An effective response to a SARS outbreak will require the coordinated efforts of a wide variety of organizations, private as well as public, and health as well as non-health related.
P. Horizontal and vertical communication will be necessary to ensure an effective response.
Q. Delivery of multi-lingual messages, and the availability of personnel with multi-lingual skills will be necessary.

## III. Coordination, Decision Making and Authority

In accordance with the Virginia Department of Health Policy on Delegation of Emergency Authority, during emergencies declared by the Governor:

*"…the Commissioner will delegate additional operational authority over the agency's work units throughout the state, to the Deputy Commissioner, Emergency Preparedness and Response (DCEPR) utilizing the incident command model.*

*The Commissioner will document the authority delegated to the DCEPR in writing and specify the duration of the operational authority and will notify all affected work unit directors.*

*In such cases where the Commissioner delegates this authority, the DCEPR will serve as the agency's incident commander and will be the VDH representative to the State Emergency Operations Center (EOC).*

*In a declared emergency, District Health Directors will continue their current role to*

*work with and through the local EOC for the purpose of identifying what is needed to protect the public's health. The local EOC will communicate those needs to the state EOC and the DCEPR will coordinate the agency's response with the Commissioner.*

*During declared emergencies, all Departmental personnel are expected to assist as directed.*

***Procedures:***

*The DCEPR will work through the appropriate Deputy Commissioner to assign specific tasks to individual work units. In the absence or unavailability of the Deputy Commissioner, the DCEPR will work with the respective Executive Advisor. In the event of non-availability of either the Deputy Commissioner or the Executive Advisor, the DCEPR is authorized to assign tasks directly to specific work units.*

*As departmental incident commander, the DCEPR will determine the requirements and priority of tasks statewide, and also determine the necessity of reassigning individuals to meet the need region-by-region as required.*

*When directed by the Department of Emergency Management (DEM), pursuant to the Interstate Emergency Assistance Compact, the DCEPR will coordinate all out-of-state emergency cooperation and requests for support in consultation with the Commissioner and with jurisdictions requiring assistance."*

Those regions sharing a border with neighboring states and the District of Columbia are authorized to coordinate preparedness and response activities with those jurisdictions.

During emergency situations, those districts within the National Capital Region (NCR) will maintain connectivity with neighboring jurisdictions through the NCR Regional Incident Communication and Coordination System (RICCS). RICCS notification is for informational purposes only. RICCS is designed to facilitate the ability of all sections of the NCR healthcare community to communicate with one another and with the public in an emergent situation. Refer to the NCR Regional Emergency Coordination Plan (R-ESF-8) for further coordination assistance.

Several sections within the Code of Virginia give the Board of Health and the State Health Commissioner the authority to perform certain acts to protect the health of citizens. Sections of the Virginia Code and corresponding authority, which may be exercised during a SARS outbreak, are listed in Table 1.

**Table 1. Code of Virginia Statute and Corresponding Authority**

| Statute | Authority |
|---|---|
| **Reporting of Disease** Sections 32.1-35, 36 | • Requires reporting of selected diseases to the Board of Health by physicians practicing in Virginia. |
| **Investigation of Disease** Section 32.1-39 | • Authorizes the Board of Health to provide for surveillance and investigation of preventable diseases and epidemics, including tracing of contacts. |

| | |
|---|---|
| **Disease Control Measures**<br>Sections 32.1-42; 32.1-43; 32.1-48 | • Authorizes the Board of Health to promulgate regulations and orders in an emergency or to prevent a potential emergency caused by a disease dangerous to public health.<br>• Authorizes the Commissioner to require quarantine, vaccination, or treatment of any individual when he determines it necessary to control the spread of any disease of public health importance. |
| **Emergency Orders and Regulations**<br>Sections 32.1-13; 32.1-20 | • Authorizes the Board of Health to make orders and regulations to meet any emergency, for the purpose of suppressing nuisances dangerous to public health and communicable, contagious, and infectious diseases and other dangers to the public life and health.<br>• Authorizes the Commissioner to act with full authority of the Board of Health when it is not in session. |
| **Isolation of Certain Persons with Communicable Diseases**<br>Sections § 32.1-48.02; §32.1-48.03; | • Authorizes the Commissioner to order individuals with airborne communicable diseases be taken into custody.<br>• Authorizes the Commissioner to petition for a hearing on the temporary detention of individuals infected with a communicable disease.<br>• Provides guidelines for isolation hearings. |

On April 24, 2003 SARS was added to the list of reportable diseases in Virginia (See: Appendix A: Letter Notifying Doctors of SARS Reporting Requirements). On April 4, 2003, the President of the United States signed an executive order adding SARS to the list of quarantinable communicable diseases. This act provides the Centers for Disease Control and Prevention (CDC), through the Division of Global Migration and Quarantine, with the legal authority to implement isolation and quarantine measures as part of transmissible disease-control measures, if necessary.

## IV. Public Health Impact

SARS is a novel condition first identified in February of 2003. It is characterized by rapid onset of high fever, myalgia, chills, rigors, and sore throat, followed by shortness of breath, cough, and radiographic evidence of pneumonia. SARS has been associated etiologically with a previously unknown coronavirus, SARS-CoV.

The incubation period for SARS is typically 2-7 days; however, isolated reports have suggested an incubation period as long as 10 days. The illness begins generally with a prodrome of fever (>100.4° F). Fever is often high, sometimes associated with chills and rigors, and may be accompanied by other symptoms, including headache, malaise, and myalgia. At the onset of illness, some persons have mild respiratory symptoms. Typically, rash and neurologic or gastrointestinal findings are absent; however, some patients have reported diarrhea during the febrile prodrome.

After 3-7 days, a lower respiratory phase begins with the onset of a dry, nonproductive cough or dyspnea, which may be accompanied by or progress to hypoxemia. In some cases, the

respiratory illness is severe enough to require intubation and mechanical ventilation.

The severity of illness is highly variable, ranging from mild illness to death. Viruses that cause respiratory illnesses are capable of causing a range of clinical manifestations, and asymptomatic infections may be possible; however no instances of SARS-CoV infection have been detected in persons who are asymptomatic. Similarly, the clinical manifestations of SARS may extend beyond respiratory illness.

Understanding the epidemiology of respiratory pathogens such as those that cause SARS is difficult; approximately 40%-60% of persons with pneumonia do not have a defined etiology, even when extensive testing for known respiratory pathogens is attempted. Minimizing transmission will require sustained attention to infection-control interventions within health-care settings and the community. SARS has displayed efficient nosocomial transmission and widespread infection has been reported among hospital workers in some Asian cities to date.

As of June 4, 2003, the overall case fatality rate for SARS was approximately 9%. Presence of underlying disease and advanced age have been shown to be contributing factors when assessing the likelihood of dying from SARS. Current information on the number and location of SARS cases can be found on the World Health Organization (WHO) website (http://www.who.int/csr/sars/country/en/).

## V. Surveillance and Investigation

### A. Initial Assessment

1. After receiving an inquiry from a patient, private medical doctor, hospital, or the CDC about a potential case of SARS, local health department (LHD) personnel, with the assistance of the Division of Surveillance and Investigation (DSI) within the VDH, should assess whether the patient meets the case definition for SARS. If the individual meets the case definition (suspect, probable), guidelines outlined under Section C, listed below, are followed. Refer to the CDC web page at: http://www.cdc.gov/ncidod/sars/pdf/sars-casedefinition.pdf for the most recent case definition of SARS.
2. If the patient does not meet the criteria fulfilling a case definition, the LHD should assess the patient and determine if a high-risk situation exists (See Section B below). If a high-risk situation does not exist, no additional actions are necessary.

### B. High-Risk Situations

The following individuals and groups are defined as high risk for acquiring SARS:

- healthcare workers with an exposure to a SARS patient,
- close contacts of SARS patients, and
- individuals with a recent travel history to a high-risk area. Refer to the CDC web page at: http://www.cdc.gov/ncidod/sars/travel.htm#outside for a listing of high-risk areas.

The following recommendations should be implemented for high-risk individuals or

groups:

1. Advise the individual to remain vigilant for fever or respiratory symptoms for ten days following travel or exposure to a SARS patient.
2. Individuals who do not have a fever and do not have respiratory symptoms do not need to be isolated.
3. If the individual reports a documented fever or experiences respiratory symptoms, the individual is advised to adhere to the following guidelines: limit interactions outside the home; refrain from attending work, school, childcare, church or visiting other public areas; and use infection control precautions to minimize potential for transmission.
4. If the individual progresses to meet the case definition, the individual should be considered and managed as a suspected SARS case, as outlined under section C. If symptoms improve or resolve within 72 hours after first symptom onset, the person may be allowed, after consultation with public health authorities, to return to work, school, childcare, church, or other public areas, and infection control precautions can be discontinued. If the illness does not progress to meet the case definition, but the individual has persistent fever or unresolving respiratory symptoms, infection control precautions should be continued for an additional 72 hours, at the end of which time a clinical evaluation and public health consultation should occur.

## C. Response Actions for Local Health Departments for Suspected SARS Cases

**Immediate Actions:**

1. Ensure the medical care facility implements SARS infection control measures immediately. Refer to Section VII, Infection Control and the CDC web site (http://www.cdc.gov/ncidod/sars/infectioncontrol.htm) for additional information. Confirm that diagnostic testing as described in section VI, Management of Suspect Cases, is being conducted.
2. Advise the facility to obtain specimens per CDC protocol, which can be found at: http://www.cdc.gov/ncidod/sars/pdf/specimencollection-sars2.pdf. If needed, LHD should provide viral transport medium for nasopharyngeal and oropharyngeal swabs. Once specimens are collected, arrange for the courier to transport them to the Division of Consolidated Laboratory Services (DCLS). Ensure the proper forms accompany the specimens. Refer to section VIII, Role of the Public Health Laboratory, and Appendix D of this plan for more details about specimen collection and transport.
3. Immediately obtain detailed information about the patient's travel history (e.g., flight itinerary) and medical history (e.g., onset of symptoms). Information should be recorded on the standard SARS Patient Intake Form, which can be found on the internal VDH web page at: http://vdhweb/epi/SARSIntFrm429.pdf. When completed, the form should be faxed immediately to DSI at (804) 371-4050. In some instances, such as for persons who meet the probable case definition, a longer form will need to be completed.
4. Identify household and close contacts of the patient.
5. Provide information about the disease and the risk of transmission to the ill person and his/her contacts.
6. Work with the facility where the patient presented for care to ensure that healthcare workers remain vigilant for onset of fever or respiratory symptoms for ten days

following exposure to the suspect SARS patient. Ensure that the facility is aware of guidelines and recommendations outlined in the CDC document "Interim Domestic Guidance for Management of Exposures to SARS for Healthcare Settings", which can be found at: http://www.cdc.gov/ncidod/sars/exposureguidance.htm.

7. Request the patient to remain isolated for 10 days following resolution of fever and until respiratory symptoms have resolved or significantly improved. After consulting with the Commissioner, Deputy Commissioner for Public Health, or the State Epidemiologist, the District Health Director will send a letter directing the patient to remain isolated and advising of ways to decrease transmission of SARS in the home setting. (See: Appendix B: Letter to SARS Patients).

**Follow-up Actions:**

1. Monitor the compliance of the ill person with voluntary isolation through, at a minimum, daily telephone calls.
2. Monitor all household and close contacts of the patient for 10 days following exposure to the case or, if contacts live with the case, for 10 days following resolution of fever and respiratory symptoms in the case. Advise contacts to measure temperature twice a day. Call contacts daily and record temperature readings and any respiratory symptoms. Manage contacts per section B, High-Risk Situations.
3. Convalescent specimens need to be collected after the twenty-first day following onset of symptoms. Coordinate collection and submission to DCLS.
4. Participate in special investigations (e.g., transmission to household contacts, natural history of disease, and healthcare worker transmission of SARS), as requested by DSI and CDC, as resources permit.
5. If evidence suggests a lack of compliance with isolation by the case or contacts, the District Health Director will telephone or send an e-mail message to the State Epidemiologist, describing the non-compliance, and requesting an isolation/quarantine order. A central office epidemiologist will review the case and prepare an order for the Commissioner or Deputy Commissioner for Public Health to sign. Once signed, the order will be faxed to the district health department, who will share the faxed copy with the case/contact. An original will also be mailed to the case/contact, with return receipt requested. (See: Appendix C: Isolation Order Letter). If noncompliance continues, a detention order may be needed.
6. When laboratory results are received from DSI, provide results to submitting physicians and patients. Provide CDC fact sheets on interpretation of laboratory results to submitting physicians and patients. The fact sheets can be found at: http://www.cdc.gov/ncidod/sars/pdf/testresultsc.pdf and http://www.cdc.gov/ncidod/sars/pdf/factsheetcc.pdf.

## D. Response Actions for the Division of Surveillance and Investigation for Suspected SARS cases

**Immediate Actions:**

1. Provide consultation and technical assistance to the LHD as needed on issues such as case classification, specimen collection, infection control, etc.
2. Confirm that the LHD is aware of forms that need to be completed and where to find them on the Internet. Confirm that infection control practices are being instituted.

3. Notify the CDC about the case and consult with them regarding the status of the case. CDC will assign a case identification number. DSI will also assign a state case identification number.
4. Enter the case into a log, which can be accessed by all staff in the division.
5. Consult with the DCLS about specimen collection and submission.

**Follow-up Actions:**

1. Notify LHD of date to submit convalescent specimens and coordinate submission of specimens to DCLS.
2. Coordinate special investigations (e.g., transmission to household contacts, natural history of disease, and healthcare worker transmission of SARS), as requested by CDC and as resources permit. Assist with resource procurement when possible.
3. When notified by the LHD that a patient is not complying with the direction to isolate, prepare an official isolation order to be signed by the State Health Commissioner (See: Appendix C: Isolation Order Letter). Ensure that a copy is faxed to the LHD so that it can be delivered to the patient and ensure that an original is mailed to the case/contact with return receipt requested.
4. Provide copies of laboratory results received from CDC to local health departments. An e-mail notification will be sent to the district health department immediately upon receipt of the laboratory results, and a copy of the results will follow in the mail.

## E. Recommendations for Quarantine

In the absence of documented community spread of SARS or increased transmission to healthcare workers or contacts of SARS patients in the United States, VDH does not recommend quarantine, except in the following circumstances:

1. *Healthcare workers who have an unprotected high-risk exposure to a SARS patient:* A high-risk exposure would be a procedure capable of stimulating cough and promoting generation of aerosols in patients with suspect or probable SARS, including: administration of aerosolized medication treatment; diagnostic sputum induction; bronchoscopy; airway suctioning; endotracheal intubation; positive pressure ventilation via facemask during which air may be forced out of facemask; and high frequency oscillatory ventilation. Healthcare workers with an unprotected high-risk exposure should be excluded from duty for 10 days following exposure and should follow infection control procedures at home.
2. *Symptomatic, exposed healthcare workers who do not fully meet the case definition or symptomatic travelers who do not fully meet the case definition:* Individuals should be managed as outlined under section B, High-Risk Situations.

Quarantine recommendations will likely change if there is evidence in Virginia or in the United States of increased spread of SARS to contacts, healthcare workers, or community members (for example, if infection control procedures are being properly followed yet there is evidence of spread to contacts or healthcare workers, or if there is suspected transmission in large groups or communities). In those instances, VDH will work closely with the hospital and with the case to ensure that all household, healthcare, or other close contacts who may have had an unprotected exposure are identified and will discuss the need to place individuals or groups under quarantine. Evaluation will occur on a case-by-case basis. A draft quarantine order is

being prepared in case such a situation emerges.

All surveillance and investigation procedures outlined in section V will be updated based on recommendations from the CDC and changing knowledge and best practices.

## VI. Management of Suspected Cases

Health-care providers of patients whose illness is consistent with the case definition for SARS should conduct diagnostic evaluation for other causes of respiratory illness. Initial diagnostic testing should include chest radiograph, pulse oximetry, blood cultures, sputum stain and culture, and testing for viral respiratory pathogens, notably influenza A and B and respiratory syncytial virus. Additional diagnostic evaluation should be conducted for other causes of respiratory illness.

No specific treatment recommendation can be made at this time. However, when appropriate, empiric therapy that includes activity against organisms associated with community-acquired pneumonia of uncertain etiology, including agents with activity against both typical and atypical respiratory pathogens. Treatment choices may be influenced by severity of the illness. Infectious disease consultation is recommended.

Although the mechanism of SARS transmission remains unclear, droplet and contact transmission appear to be the predominant modes. Clinicians evaluating suspected cases should use standard precautions (e.g., hand hygiene) together with airborne (e.g., N-95 respirator) and contact (e.g., gowns and gloves) precautions. Refer to the CDC document, Updated Interim Domestic Infection Control Guidance in the Health Care and Community Setting for Patients with Suspected SARS, found at: http://www.cdc.gov/ncidod/sars/infectioncontrol.pdf, for more information. Until the mode of transmission has been defined more precisely, eye protection should also be worn for all patient contact.

## VII. Infection Control

### A. Precautions

CDC has developed interim infection-control guidance for the U.S. in health-care and household settings (Refer to the CDC web page at: http://www.cdc.gov/ncidod/sars/infectioncontrol.htm and http://www.cdc.gov/ncidod/sars/ic-closecontacts.htm). These recommendations are based on experience in the United States to date and will be revised as more information becomes available.

If a suspect SARS patient is admitted to the hospital, infection control personnel should be notified immediately. Infection control measures should be utilized by anyone entering a patient's room and should include:

- Standard precautions (e.g., hand hygiene); in addition to routine standard precautions, health-care personnel should wear eye protection for all patient contact

- Contact precautions (e.g., use of gown and gloves for contact with the patient or their environment)

- Airborne precautions (e.g., an isolation room with negative pressure relative to the surrounding area and use of an N-95 filtering disposable respirator for persons entering the room)

- Limit the use of aerosol-generating procedures on SARS patients to those that are deemed medically necessary. Use clinically appropriate sedation during intubation and bronchoscopy to minimize resistance and coughing during the procedure.

- Limit the number of healthcare workers present in the room during an aerosol-generating procedure to those who are essential for patient care and support.

If airborne precautions cannot be fully implemented, patients should be placed in a private room with the door shut, and all persons entering the room should wear N-95 or higher efficiency particulate respirators. A qualitative fit test should be conducted for N-95 respirators; detailed information on fit testing can be accessed at: http://www.osha.gov/SLTC/etools/respiratory/oshafiles/fittesting1.html. Fit tested N-95 respirators are highly recommended; however if they are not available for health-care personnel, then surgical masks should be worn. Ideally, health care personnel will have fit-tested N-95 respirators available prior to the event of an emergency. A new N-95 respirator should be worn for each patient contact. If this is not possible, a surgical mask can be worn over the mask to help prevent contamination. Health care personnel should be mindful to thoroughly wash their hands with warm soap and water or alcohol based rubs after removing their masks.

Where airborne precautions are not available, or the patient is in transit, the patient should wear a surgical mask if clinically possible. Regardless of the availability of facilities for airborne precautions, standard and contact precautions should be implemented for all suspected SARS patients.

**B. Decontamination**

Cleaning and disinfection of environmental surfaces are important components of routine infection control in healthcare facilities. Although environmental surfaces (e.g., floors, table tops) are generally not involved in the transmission of microorganisms, some surfaces, especially those that are touched frequently (e.g., bed rails, door knobs, lavatory surfaces) may serve as important reservoirs of microbial contamination. The performance of hand hygiene and adhering to a regular schedule of cleaning and disinfection will help reduce the microbial burden in the patient's environment. The approach to environmental cleaning and disinfection for SARS will follow the same principles used for controlling the spread of other infections in healthcare settings. These recommendations on decontamination procedures are subject to change as more information is gathered about SARS.

Personnel involved in cleaning and disinfection activities should wear appropriate personal protective equipment as required for contact and airborne precautions (disposable gown, utility or medical gloves, and N-95 respirator) as long as the patient is in the room. In addition, eye protection (goggles or face shield) should also be worn. Once the patient has been transferred or discharged, keep the room door closed and postpone initiation of cleaning to allow

for the ventilation system to remove any residual viral particles (approximately 30 minutes). In most general patient care areas in U.S. healthcare facilities, the heating, ventilation, and air-conditioning systems provide approximately 6-12 air changes per hour. Wear gown and gloves for post-discharge cleaning.

For cleaning and disinfection purposes, any low- or intermediate-level EPA-registered hospital detergent-disinfectant currently used by healthcare facilities for environmental sanitation may be used. Manufacturer recommendations for dilution, contact time, and care in handling should be followed.

In-patient rooms housing SARS patients should be cleaned and disinfected daily and at the time of patient transfer or discharge. Daily cleaning and disinfection should include horizontal surfaces (e.g., over-bed table, night stand), surfaces that are frequently touched by patients and healthcare personnel (e.g., bed rails, phone), and lavatory facilities. To facilitate daily cleaning, the area around the patient should be kept free of unnecessary equipment and supplies. Terminal cleaning and disinfection should include the surfaces described above, plus obviously soiled vertical surfaces, frequently touched surfaces (e.g., light cords and switches, door knobs), and durable patient equipment (e.g., bed, wheelchair, commode). Curtain dividers also should be cleaned and laundered as appropriate for the curtain fabric. There is no need to routinely clean and disinfect walls, windows, drapes, or other vertical surfaces unless visibly soiled. Disinfectant fogging for purposes of air disinfection is not recommended.

Patient care equipment such as mechanical ventilators, pulse oximeters, and blood pressure cuffs should be cleaned and disinfected in accordance with current CDC recommendations, manufacturer's instructions, and facility procedures. See: http://www.cdc.gov/ncidod/hip/sterile/sterile.htm.

Cubicles or rooms in outpatient areas where patients with suspected SARS are evaluated should be cleaned and disinfected before another patient is seen or cared for in that environment. Solutions used for cleaning and disinfection should be discarded after use without being re-used in another room. Housekeeping equipment used in a SARS area should be thoroughly rinsed and cleaned before being re-used elsewhere.

## VIII. Role of the Public Health Laboratory

### A. Overview

Laboratory testing to support public health decisions about SARS disease will be performed at Virginia's state public health laboratory, the Division of Consolidated Laboratory Services, and/or at the Centers for Disease Control and Prevention. All patient specimens should be sent to DCLS (not to CDC). VDH state and district offices will work with DCLS to ensure proper collection, transport, and testing of specimens for the SARS coronavirus. There are two requirements specific to SARS laboratory testing: (1) At the time of specimen collection, the health care provider is strongly advised to obtain written consent from patients prior to collection of specimens for testing. The CDC consent forms and details for use are available electronically at: http://www.cdc.gov/ncidid/sars/diagnoisis.htm. Although not optimal, if for whatever reason the informed consent process is not utilized and written consent is not obtained, the specimens

can still be submitted to the laboratory for testing. (2) Each patient must be assigned a state or CDC identification number by a VDH central office epidemiologist. The case number may be obtained after specimen collection, but must be assigned before laboratory testing can be performed. Assignment of the case number assures proper tracking in the public health system. This number should be placed on all questionnaires and lab forms.

Results of laboratory testing at DCLS and/or CDC will be reported by DCLS to the health care provider and to the VDH State Epidemiologist who will notify district staff immediately.

### B. Laboratory Testing for SARS Coronavirus

At this time, SARS remains a disease defined by clinical and epidemiologic criteria. However, results of research laboratory tests for the SARS coronavirus are being used to support epidemiologic investigation and decisions. The type, format, and interpretation of laboratory tests for the SARS coronavirus will evolve as further experience is gained. As of this writing, two types of research laboratory tests are routinely used: reverse-transcription polymerase chain reaction (RT-PCR) amplification to detect viral nucleic acid in respiratory specimens during the acute illness, and enzyme immunoassay (EIA) to detect antibodies in serum during the acute and convalescent stages of illness. Other tests such as culture are also available at CDC, but are not as useful for routine diagnosis.

During the acute stage of SARS disease, both an upper respiratory specimen (such as a nasopharyngeal swab) and an acute serum specimen should be collected and submitted for testing. Positive results on these acute specimens are suggestive of infection with the SARS coronavirus. However, negative results on acute specimens cannot be used to rule out infection; a patient with negative results from acute specimens may or may not be infected with the SARS coronavirus. SARS patients with negative test results still have the clinical diagnosis of SARS and should adhere to isolation precautions recommended for all patients with SARS.

During convalescence, a second serum specimen should be obtained more than 21 days after the onset of symptoms. If antibodies are not detected in serum more than 21 days after symptoms began, it is unlikely that the patient was infected with the SARS coronavirus. However, interpretation of serology results is still being refined as more data are accumulated worldwide.

Other specimens may be obtained and tested by various methods as part of ongoing CDC investigations. Consultation about specimen collection is available by contacting DCLS and at the CDC website. DCLS specimen collection instructions for SARS testing are provided in Appendix D: Specimen Collection for SARS-associated Coronavirus (SARS-CoV) Testing.

### C. Specimen Transport

DCLS must be notified in advance that specimens for SARS testing will be shipped. Before shipping, ensure that specimens are correctly labeled and that both a completed DCLS request form (DGS Form #- 22-164[Rev.1/89]) and a CDC submission form have been included with the specimens. Blood tubes and respiratory specimens may be shipped together. They should be packed with cold packs in coolers to insure refrigeration during shipment. Ship specimens to:

Division of Consolidated Laboratory Services
Sample Receiving, Room 155
Attn: VIROLOGY
600 North 5th Street
Richmond, VA 23219

The shipper is responsible for compliance with all packaging and shipping guidelines.

A courier service provides transport of specimens from all thirty-five health districts across the state to DCLS. The courier service is routinely available Monday through Thursday; specimens should not be sent on Fridays unless special arrangements have been made with DCLS. Specific information about pickup and delivery times and locations is available from health district offices. For certain urgent cases, it's possible for DCLS to arrange special courier services to pick up specimens and deliver them to the state lab.

## IX. Surge Capacity and Mass Care

Local Health District Directors should request VDH reinforcement from DCEPR to increase investigation and surveillance capacity. Personnel have been identified department wide, who are capable to assist. DCEPR will request reinforcement through the appropriate Deputy Commissioner.

- Under the auspices of the local Incident Command structure, through local and regional government representatives and with Emergency Management partner agencies, District Health Directors will be prepared to identify surge capacity requirements in the event of a SARS outbreak:
    - Local Health Districts Directors or their designated representatives will contact hospitals within their jurisdictions to collaborate with them in planning provisions for mass care of community members. Offsite triage, care, transportation and housing of patients should be considered along with support requirements and potential sourcing including but not limited to: staffing, IT / communications, equipment, food / potable water. sanitation, transport, security, tentage / cover (for outside locations).
    - Employing worst case planning and using JCAHO standards as a general guide, identify potential SARS treatment facilities to accommodate up to 500 per million population (limited outbreak) and 1,000 per million population (larger outbreak).
- Regional EP&R Teams will:
    - Assist and reinforce District Health Director as required.
    - Coordinate intra-regional surge efforts among districts as required.

- Coordinate inter jurisdictional support.
- Facilitate coordination and cooperation with out-of-state jurisdictions.
- Identify and report regional hospital bed availability and overflow capacity.
- Coordinate regional operations with VDEM counterparts.
- With District Directors determine the requirement to request the Strategic National Stockpile (SNS).
- Coordinate SARS planning with airport and seaport authorities as required.
- Coordinate isolation and quarantine enforcement support with local law enforcement agencies.

## X. Communication

### A. Goals and Objectives:

The primary communication goal of VDH for the response to SARS is to ensure timely, accurate, honest, and consistent flow of information.

- VDH will provide information on SARS to health care providers, hospitals, other stakeholders, other key partners, the media and the general public.

### B. Primary Messages to Communicate on SARS:

- VDH will do everything possible to isolate those individuals with suspect or probable SARS to prevent spread.
- **Explain the risk:** At this time, most of the U.S. cases of SARS have occurred among travelers returning to the United States from other parts of the world with SARS. There have been very few cases as a result of spread to close contacts such as family members and health care workers. Currently, there is no evidence that SARS is spreading more widely in the community in the United States.
- **Explain process/response:** Provide details on what is being done to respond to situation. Explain steps VDH/LHDs take when they receive a report of a suspect case.
- Provide as much information as possible on the precautions/protocols taken at hospitals.
- **Prevention:** Frequent and effective hand washing; avoiding unnecessary exposure to crowds

- There is no cure but supportive care can be effective, especially for those with underlying illness.

- Contact your physician immediately if you meet the case criteria for SARS. Limit contact with others. Call ahead to your health care provider before arriving at the hospital or doctor's office.

- Physicians report suspected SARS cases to their local health departments by the most rapid means available.

**C. Protocols for Information Dissemination:**

- VDH recognizes that any SARS suspect or probable cases or outbreak of SARS will generate a high volume of public concern and media attention. The VDH Public Relations (PR) Manager will oversee all public and media relations for the state agency. The Office of Epidemiology (EPI) PR Coordinator will lead the development and release of any SARS related materials or information to the public or media under the direction of the State Epidemiologist. The EPI PR Coordinator will lead the release of SARS related materials and information with the assistance as needed by the Regional Public Information Officers (PIO) or Local Health District Directors. The State Epidemiologist will lead efforts to ensure communication between all health care providers is handled appropriately.

- Details on the protocols and procedures for managing media relations and plans for responding to a communication crisis can be found in the "*VDH Interim Crisis & Emergency Risk Crisis Communication Plan" – Update December 3, 2002*

- In the event of a state of emergency declaration by the Governor, the Department of Emergency Management's Office of Public Affairs becomes the lead state agency for the organization and management of the dissemination of information. VDH functions as described within this plan would be coordinated through the DEM Joint Information Center.

**D. Spokespersons:**

- The State Health Commissioner, DCEPR, Deputy Commissioner for Public Health, and the State Epidemiologist (or his designee) will serve as the principle spokespersons on the state level in regard to SARS. Regional Medical Consultants and/or Epidemiologists are consulted on multi-jurisdiction situations within a region and may serve as a spokesperson.

- On the local level, the Local Health Directors or their designee will serve as the spokespersons. The EPI and Regional PIOs also will provide information to media outlets, but will arrange interviews with the noted medical spokespersons in most cases to provide expert and credible quotes and sound bites. Close collaboration with area hospitals and health care providers will be necessary to coordinate public and media messages.

**E. Methods:**

- A public information committee comprised of the Public Relations Manager, Office of

Epidemiology Public Relations Coordinator, State Epidemiologist or his designee, Regional Public Relations Coordinators, and one available field representative from each region will review talking points, FAQs, and fact sheets (excluding press releases from the central office) before distribution to the public. In the event that time is of the essence, the committee may be abbreviated to include a smaller number of reviewers.

- VDH will disseminate information to all audiences through press conferences, press releases, media interviews, the EPI Website, Regional PIOs, local health department contacts, the Health Alert Network, professional medical organizations, and other resources.

- The VDH Website will be updated once daily, Monday through Friday (excluding holidays) no later than 10 a.m. to provide all audiences appropriate data on SARS, VDH related SARS informational materials, and links to CDC SARS information. Any changes that occur after the update will be posted on the following day. The site indicates the date upon which it was last updated.

- For non-English speaking populations, VDH will use translated SARS materials provided by the CDC, or for customized information the agency will tap into existing resources within the Northern Virginia Health Education Center (NVHEC) for the translation and dissemination of information to non-English speaking populations. VDH currently has a contract for rapid information translation services through NVHEC.

- VDH will use the CDC Public Response Service Hotline as a tool for providing the public with access to information on SARS by telephone. The hotline contact numbers are as follows: English- 888-246-2675, Spanish- 888-246-2857, TTY- 866-874-2646. In addition, if a SARS outbreak triggers the declaration of a state of emergency by the Governor, then the Department of Emergency Management Public Inquiry Center (PIC) could be opened to receive calls directly from Virginians. A PIC action plan has been established and state employees have been trained in the operation of the PIC.

- VDH will disseminate and coordinate information with local public health officials through e-mail, conference calls, and video conference meetings.

- VDH will disseminate and coordinate information with hospitals through the Local Health Directors, the Office of Epidemiology, the Virginia Hospital & Healthcare Association, and the Health Alert Network.

- VDH will disseminate and coordinate information with other healthcare providers through the Local Health Directors, Office of Epidemiology, Health Alert Network, Medical Society of Virginia, and other recognized resources.

**F. Materials:**

The following materials are currently available:

- Letter to Health Care Providers – Posted on VDH EPI Website
- Current Case Definitions, Guidance to Travelers, Symptoms and Frequently Asked Questions (FAQ) at: http://www.cdc.gov/ncidod/sars/
- Talking points for local health directors (Appendix E: SARS Talking Points)

- Letter to travelers and hosts of travelers from SARS impacted countries (Appendix F: Letter to Travelers)
- Template FAQ article for local health departments (Appendix G: SARS Template Article)

**G. Monitoring Emerging Communication Issues:**

- VDH Public Relations staff will pay close attention to media reports on SARS through its media monitoring subscription (capitolwire.com) to gauge reaction to the situation and to look for possible reports of misinformation. News articles on SARS will be collected and sent to the field via e-mail as needed. In a "state of emergency" daily updates, including news articles, will be coordinated through the Joint Information Center.

- VDH Office of Epidemiology will provide daily updates of SARS cases and potential SARS issues to key personnel in the field.

- VDH also has existing relationships and open lines of communication with stakeholders on the state and local level in order to receive requests for information or questions concerning particular issues.

- VDH will immediately respond to misinformation or questions regarding particular issues though press releases, phone calls or e-mails directly to reporters or the organization requesting clarification, or by posting updated information on the VDH website.

- VDH will request the local Emergency Planners set up a system for tracking the number of incoming calls from the public regarding SARS. Trends in misinformation or growing concerns can then be communicated back to the Regional PR staff and addressed in further communications with the public.

**H. Other Issues for Consideration**

Information Approved for Release

- VDH will limit any potentially identifying information released about individuals under investigation. The Office of Epidemiology will release the following information regarding suspect or probable SARS cases: date the case was reported to CDC, Health District in which the case resides, gender of individual, result of coronavirus testing, and status of case (hospitalized, released, isolated at home, etc.)

- In addition, VDH will address whether the individual has a relevant travel history (while not releasing specific information on location), is a close contact of a SARS patients, or is a healthcare worker who treated a SARS patient, or if this is possibly a case of community spread SARS.

- Additional information about suspect or probable cases may be released in the event that such information is necessary for the protection of public health.

## XI. Education and Training

It is essential that public health and medical personnel be educated on SARS, including history, epidemiology and current CDC recommendations.

Websites will be used as a central component for managing the information requests from the public. Websites should be used to organize and quickly provide information, updates, fact sheets, frequently asked question documents, and health care provider resources, including patient and public education materials to a range of audiences.

### A. Educational Materials:

A portfolio of education sources and materials needs to be in place on a range of topics, including: Characteristics of SARS (clinical and laboratory), infection control practices, and containment strategies (for household contacts, case investigation, etc.). This is accomplished by a link from the VDH Epidemiology website to the CDC website.

Once more definitive information is available from CDC, VDH will develop educational packets, which will be used to educate the public and local health departments. These packets may include:

1. PowerPoint presentations
    a. Severe Acute Respiratory Syndrome (SARS) overview
    b. SARS Epidemiology
    c. SARS Guidance for Physicians

2. Handouts
    a. Chart of Diagnosis and Treatment for Physicians
    b. Guidance for Lab Specimen Collection
    c. SARS fact sheet for healthcare professionals
    d. SARS fact sheet for the general public
    e. Detailed guidance for healthcare professionals and public health staff

3. Brochures
    a. SARS brochure for physicians
    b. SARS brochure for public

4. Electronic media (e.g. Web page, CD-ROMs) should be used to disseminate information whenever possible.

### B. Target Audiences:

1. Educational Target: Local Health Departments (LHD)
   As soon as the material is created, education packets will be made available to:
    a. District Health Directors
    b. District Epidemiologists

c. Regional Epidemiologists
d. District Emergency Planners
e. Regional Emergency Planners
f. Local Public Information Officer
g. Communicable Disease Nurses

This information will be utilized by the health department staff for training and education of the health care providers and the general public.

2. Educational Target: Private Providers
   Utilize the health department staff and district Epidemiologists to bring SARS educational information to Infection Control Practitioners (ICP) in the hospitals. This information includes:
   a. Signs and symptoms of SARS
   b. Isolation of SARS patients
   c. Recommended infection control practices, including the use of personal protective equipment and procedures
   d. Management of healthcare worker exposures
   e. Work with local medical societies to distribute information.

3. Educational Target: General Population of the Commonwealth
   a. Release universal SARS educational messages across the state.
   b. Utilize health department staff to train:
      - Patients: how to isolate themselves and infection control precautions they need to take
      - Contacts: precautions they need to take
   c. Post Fact Sheets on the VDH external and internal website regarding
      - Disease Identification
      - Disease Communicability

## Appendix A:
## Letter Notifying Doctors of SARS Reporting Requirements

April 28, 2003

Dear Doctor:

On April 24, 2003, Governor Mark Warner signed an emergency regulation making Severe Acute Respiratory Syndrome (SARS) a reportable condition. As a result, all suspect cases of SARS must be reported to your local health department by the most rapid means available.

SARS is a newly identified syndrome that has caused illness in over 3,500 people outside the United States and has led to 182 deaths. In the U.S., 220 people are suspected to have had SARS, with no deaths reported to date. This viral infection has been transmitted from person to person and has spread quickly to numerous regions of the world.

The Virginia Department of Health (VDH) has been tracking and responding to the reports we have received of potential SARS cases since February 2003. We appreciate your notifying us of these illnesses and the excellent cooperation you have provided in our investigations. We are following the case definition and disease investigation and control procedures defined by the Centers for Disease Control and Prevention (CDC). The case definition and recommendations change regularly as new information becomes available. The best way to keep current is by visiting the CDC website at www.cdc.gov/ncidod/sars for the latest information. You can also learn about the number of SARS cases in Virginia by accessing the VDH website at www.vdh.state.va.us.

When the health department learns of a possible case of SARS, we work with providers to assess the case to determine if the SARS criteria are met, consult with the CDC SARS investigation team, advise regarding the collection and shipment of specimens for laboratory analysis, and ensure proper infection control procedures are put in place by ill persons and those who care for or live with them. We interview the ill individuals about exposure and illness histories and monitor contacts as well.

In preparation for the possibility that the SARS situation may worsen, we are preparing isolation and quarantine orders in the event that such are needed. An isolation order will be needed if ill persons are not hospitalized and not compliant with a stay-at-home recommendation of the health department. Quarantine orders would be indicated if the situation develops such that contacts of ill individuals need to be kept at home in order to prevent the spread of disease. We are attempting to be prepared for any eventuality.

We appreciate your diligence in partnering with the Virginia Department of Health to

monitor and control SARS and other emerging diseases of public health importance.

Sincerely,

Robert B. Stroube, M.D., M.P.H.
State Health Commissioner

## Appendix B:
## Letter to SARS Patients

XX Health District
City, Virginia

Dear Patient:

You have recently been diagnosed with suspected Severe Acute Respiratory Syndrome (SARS). This is a new disease and the cause is still unknown, but it is most likely a virus. Although you may be feeling better and are being sent home from the hospital or clinic, others who are in close contact with you could still get the infection from you.

Because SARS is contagious, strong measures must be taken to stop further spread of the disease. As a result, **you are directed to follow the guidelines below from now until 10 days after your fever is gone**. If your respiratory symptoms (cough, shortness of breath or difficulty breathing) have not improved after 10 days, you may need to follow the guidelines for a longer time. The health department will tell you if you need to follow the guidelines for longer than 10 days.

*1. Stay at home.*

- You may leave your home only if you remain on your property and have no face-to-face contact with anyone other than members of your household.
- You may not leave your property during this isolation period for any reason, except a medical emergency. Do not go to work or school, and do not go to any public areas. If you need something from outside your home, ask family, friends or neighbors who are not sick to get it for you.
- Failure to follow these instructions will place the health of others at risk. It will also result in the State Health Commissioner issuing an emergency isolation order.

*2. Use safe practices so that your household members do not get sick.*

- **Before you leave the clinic or hospital, you should be given several surgical face masks to take home with you**. When around other people in your home, you should wear a mask and be sure it covers your nose and mouth. Ask your health care provider to show you how to wear a face mask the correct way. If you need more surgical face masks, call your local drug store or ask your health care provider.
- Cover your mouth and nose with a tissue when you sneeze, cough or blow your nose. Put the used tissue in the garbage and remember to wash your hands immediately afterwards.
- While at home, limit your contact with those that live with you as much as possible. Sleep in a separate room, if possible, or at least in a separate bed. Avoid close contact such as kissing.
- **Wash your hands for at least 15 seconds often with soap and warm water or alcohol-based hand rubs**. Hand washing may be the best way to prevent others from getting sick. You should wash your hands after coughing, sneezing, blowing your nose, and going to the

bathroom.

- Throw out your used tissues and face masks with your regular garbage. Do not share eating utensils (spoons, forks, cups or glasses), towels or bedding (pillows, sheets or blankets) with others. These items can be used again after routine cleaning with soap and hot water. Do not share toothbrushes, cigarettes and other tobacco products, or drinks.
- If any of your body fluids (such as secretions from your nose or mouth) get on surfaces in your home (such as door knobs or any other object that you sneeze or cough on), the surface should be washed with a household cleaner, such as bleach (1 part household bleach to 9 parts water – a 0.5% sodium hypochlorite solution). Anyone doing the cleaning should wear gloves.
- **The Virginia Department of Health will be calling your home on a daily basis to check to see if anyone in your family or household is getting sick.** If someone you live with or spend time with gets sick with fever or respiratory symptoms (cough, shortness of breath, or difficulty breathing), please be sure that person's healthcare provider is called right away. Also call the Virginia Department of Health at the number listed below.

*3. Call your healthcare provider if your symptoms worsen.*

- **If your symptoms worsen, please call your healthcare provider immediately.** Also, please call the health department:

  **Health Department:** _____

  **Telephone Number:** _____

  **Contact Name:** _____

- **If you need to go to the doctor's office, you should have a family member or friend drive you in a private car**. Do not take public transportation (subway or bus). Please contact your doctor before you visit and tell the doctor you have been diagnosed with SARS. Wear a surgical face mask on the way to see your health care provider. You should go straight to the receptionist when you arrive so that you can be put in a private room. Try to sit away from others as much as possible.
- If you are very sick and need to call an ambulance to take you to the hospital, let the operator know that you may have SARS when you call 911, and let the ambulance crew know when they arrive.

For more information, call your doctor or health department, or visit the Centers for Disease Control and Prevention's website at www.cdc.gov/ncidod/sars.

**Sincerely,**

**District Health Director**

## Appendix C:
## Isolation Order Letter

*Patient Name*
*Street Address*
*City, Virginia ZIP code*

### Emergency Isolation Order

You have been diagnosed with severe acute respiratory syndrome (SARS), which is a newly identified, contagious, viral infection dangerous to the public health. SARS is transmitted by close personal contact with infected persons and can cause severe pneumonia and even death in as many as 9 percent of persons suffering with this disease.
You were directed by a letter (see attached) from your local health director to remain in your home during your illness in order to prevent the further spread of this disease to persons outside your household.

Your local health department has evidence that you have, in fact, not followed the direction to remain at home contained in the attached letter and, by not doing so, have placed others outside your household at risk of infection. Therefore, under the authority vested in me pursuant to Sections 32.1-13 and 32.1-42, and in accordance with Section 32.1-20, of the *Code of Virginia*, I hereby order that you, [*Patient Name*], of [*Patient Address*], [*City/Town*], remain under emergency isolation in your home for 10 days following the date that your fever returns to normal. The local health director will confirm the end of your isolation period based on the absence of fever and improving respiratory symptoms

You may leave your home only if you remain on your property and have no face-to-face contact with anyone other than members of your household. You may not leave your property during the isolation period for any reason except to visit your physician or for a medical emergency. When you leave for medical reasons, you must wear a surgical mask, and you must not use public transportation. The physician's office staff and any emergency medical personnel who attend you must be informed of your condition prior to your contact with them.

I encourage you to adhere to all other recommendations contained in the attached letter in order to limit the potential spread of the virus to others residing in your household. I further order your local health director to monitor your compliance with this order and to seek assistance from your local police authorities should you choose not to comply. Failure to comply may result in the issuance of an emergency order requiring that you be taken into custody pursuant to Section 32.1-48.02(D) of the *Code of Virginia* to ensure that you do not expose other persons to this dangerous and potentially fatal disease.

Entered [*Date*]

State Health Commissioner
Virginia Department of Health

## Appendix D:
## Specimen Collection for SARS-associated Coronavirus (SARS-CoV) Testing
## Virginia Division of Consolidated Laboratory Services (DCLS)

### General Information

1. Adhere to appropriate infection control guidelines for patient isolation, including personal protective equipment for health care workers.
2. Contact your local health department for consultation to determine whether patients meet the SARS case definition before collecting and shipping specimens for SARS-CoV testing.
3. Because SARS-CoV laboratory tests are experimental, it is strongly advised that health care providers utilize the informed consent forms provided by CDC. (Details and consent forms are available electronically at the CDC website (http://www.cdc.gov/ncidod/sars/diagnosis.htm). Consent forms should be sent with the specimen(s) to the laboratory. Note: although not optimal, if for whatever reason the informed consent process is not utilized and written informed consent is not obtained, the specimen can still be submitted to the laboratory for testing.
4. The primary specimens to collect for SARS-associated coronavirus testing are: an upper respiratory tract specimen during acute illness for detection of viral nucleic acid by RT-PCR (reverse transcription-polymerase chain reaction) and both acute and convalescent serum samples for detection of antibody by enzyme immunoassay (EIA).
5. Other specimens may be submitted in special circumstances (e.g. if specimens such as bronchial lavage, tracheal aspirate, or pleural tap have been obtained from a hospitalized patient, if other specimens are requested for CDC studies, or if an autopsy has been performed). Consult with DCLS about submission of these specimens. Directions for specimen collection and biosafety guidelines for handling specimens in the clinical laboratory are provided on the CDC website (http://www.cdc.gov/ncidod/sars).

### Overview of Routine Specimens for SARS Coronavirus Testing

| Source | Specimen | Timing of Collection | Shipment Temperature |
|---|---|---|---|
| Upper respiratory tract | Nasopharyngeal swab (1)<br>and<br>Oropharyngeal swab (1) | As early as possible in illness; best within first 72 hours after onset | Refrigerated |
| Blood | Acute serum:<br>5-10 ml in serum separator or red top tube | As early as possible in illness | Refrigerated |
| Blood | Convalescent serum:<br>5-10 ml in serum separator or red top tube | 22 days or more after onset of fever | Refrigerated |

**Collection of Nasopharyngeal and Oropharyngeal Swabs**

- Collect one nasopharyngeal swab (from both nostrils) and one oropharyngeal swab from each patient.
- Use only sterile Dacron or rayon swabs with plastic shafts. Do NOT use calcium alginate swabs or swabs with wooden sticks, as they may contain substances that inactivate some viruses and inhibit PCR testing.
- Nasopharyngeal swab – Insert swab into one nostril parallel to the palate and leave in place for a few seconds to absorb secretions. Using same swab, repeat collection from second nostril.
- Oropharyngeal swab - Swab both posterior pharynx and tonsillar areas, avoiding the tongue.
- Place each swab immediately into a sterile vial containing viral transport medium. Break applicator sticks off near the tip to permit tightening of the cap.
- Label each vial with patient name, specimen type (NP or OP), and date collected.
- Keep specimen refrigerated and ship to laboratory as soon as possible.

**Collection of Serum**

- Collect 5-10 ml of whole blood in a serum separator tube or red top tube. From pediatric patients, collect a minimum of 1 ml.
- Label each tube with patient name and collection date.
- Keep specimen refrigerated and ship to laboratory as soon as possible.

**Labeling Specimens and Packaging for Shipment**

1. Respiratory and serum specimens should be shipped refrigerated (2-8 $^{0}$ C) by including frozen cold pack(s) in an insulated shipping container.

2. Please include in the specimen shipment the following three forms filled out for each patient:
   (a) **A DCLS test request form** (DCLS reference request form DGS-22-164). This form must be fully completed, including the CDC-assigned case number, to ensure proper testing, interpretation, and reporting of results. On the "Test Requested" line, write "SARS".
   (b) **A CDC submission form** ("Specimen Submission Form for Potential Cases of SARS"), which can be printed from the CDC website (http://www.cdc.gov/ncidod/sars).
   (c) **Patient consent forms(s)**, if available.

3. Label each individual tube with the following information (at a minimum):

- Patient name

- Specimen type (NP, OP, or serum)
- Date of collection

4. Place specimens in a zip-locked plastic bag. Place that bag into a second zip-locked bag with the completed DCLS test request and CDC forms, then seal. (Specimens are now double-bagged.)

7. If specimens are to be sent via DCLS courier:
- Place zip-locked double bag containing specimens in Styrofoam box with a frozen cold pack to ensure specimens stay refrigerated during shipment.
- Label outside box with address:
"DCLS/Virology, 600 North 5th Street, Richmond, VA 23219"
- Send specimen by DCLS courier. For guidance about specimen transport, contact DCLS by pager (24/7) at 804-418-9923.

8. If specimens are to be sent by any other carrier (US mail, UPS, FedEx), ship to:

Division of Consolidated Laboratory Services
Sample Receiving, Room 155
Attn: VIROLOGY
600 North 5th Street
Richmond, VA 23219

Be aware that shipper is responsible for compliance with all current packaging and shipping guidelines:
- Public Health Service (PHS) 42 CFR Part 72; Interstate Transportation of Etiologic Agents http://www.cdc.gov/od/ohs
- Department of Transportation (DOT) 49 CFR Parts 171-178 http://www.dot.gov.rules.html
- United States Postal Service (USPS) 39 CFR Part 111 http://www.access.gpo.gov
- Occupational Health and Safety Administration (OSHA) 29 CFR Part 1910.1030 http://osha.gov
- Dangerous Goods Regulations (DGR). International Air Transport Association (IATA) http://www.iata.org or http://www.who.org

## Appendix E:
## SARS Talking Points

- There have been no deaths from SARS in Virginia or the United States to date.

- VDH recognizes the public concern over SARS and is taking all steps to prevent the spread of the disease.

- VDH continues to work closely with community physicians and hospitals in developing a strong emerging infectious disease surveillance system that ensures a quick, effective response to potential outbreaks.

- To date in Virginia all SARS cases have had recent travel history to parts of Asia impacted by the disease. There have been no cases in Virginia Involving health care personnel or close family contacts.

- It is important to remember that SARS-like symptoms alone do not indicate someone has SARS. Recent travel history to a country with community spread of SARS, or close contact with someone known or suspected to have SARS must accompany the symptoms.

- People with symptoms of SARS and recent travel history to a country with a SARS travel alert or advisory have been informed of their risk and advised to consult a health-care provider. To help the health-care provider make a diagnosis, they should tell the provider about any recent travel to places where SARS has been reported or whether there was contact with someone from those areas who had these symptoms

- VDH strongly urges people with symptoms of SARS and recent travel history to a country with a SARS travel alert or advisory, or close contact with someone known or suspected to have SARS to voluntarily isolate themselves at home and to avoid close contact with household members.

- Information about SARS continues to change frequently. For the most recent information, contact your local health department or visit the Virginia Department of Health's website at www.vdh.state.va.us.

## Appendix F:
## Letter to Travelers

Dear Interested Party:

We know from the growing volume of calls that many of you are concerned about Severe Acute Respiratory Syndrome (SARS) and how this new disease may impact Virginia visitors and citizens. At this time, the Centers for Disease Control and Prevention (CDC) and the Virginia Department of Health (VDH) do not recommend canceling or postponing classes, meetings or other gatherings that will include persons traveling to the United States from areas with SARS.

If your organization hosts travelers from around the world, you should be aware that anyone who is arriving in the United States from one of the SARS alert or advisory localities identified by the World Health Organization and the CDC will receive a health alert notice from CDC. This card warns travelers that they may have been exposed to SARS and that they should be monitoring their health for 10 days and if they become ill with fever, cough, or difficulty breathing, they should consult a physician. The information provided in the alert notice can be accessed at the CDC's SARS Website at www.cdc.gov/ncidod/sars/travel.htm.

Information on areas that are considered high risk for SARS transmission and guidelines for travelers, family members, health care workers, families of international adoptees, cruise ship passengers and crew members, and airline, airport and air travel workers is constantly being updated so we recommend that persons who are concerned about traveling or having contact with travelers check the Websites frequently (see link above).

Virginia physicians have been provided with information on SARS and know how to contact their local health departments to receive current information on managing persons who may have been exposed to SARS and what kind of laboratory samples to collect, if indicated. Local health departments have 24/7 access to someone in the Office of Epidemiology of the Virginia Department of Health who is knowledgeable about SARS and its containment. Staff in the Office of Epidemiology have access to experts at CDC.

It is important to understand that anyone known to the health department who may be infected with SARS and capable of transmitting it is isolated at home or in a health care facility to prevent spread of the infection. Fortunately, the primary way that SARS appears to spread is by close person-to-person contact. More information about how SARS is spread is available at www.cdc.gov/ncidod/sars/factsheet.htm.

Knowing how the disease is most likely to be spread helps individuals know what steps to take to minimize the possibility of becoming infected with SARS (and many other communicable diseases). Frequent hand washing with soap and water is extremely important to wash away any virus particles that may have been picked up by touching people or objects that respiratory droplets have fallen on. If hands are not visibly soiled, alcohol-based hand rubs may be used as an alternative. Don't share eating and drinking utensils and if you have to be in a country that has a SARS advisory, avoid crowds as much as possible.

At this time, CDC does not recommend quarantine of persons arriving from areas with SARS. If organization representatives become aware of a person from an area with SARS who develops

fever or respiratory symptoms, the following steps should be taken:

1. Exclude the ill person from activities (e.g., classes, meetings, and other public areas) and locate him/her in a separate area to minimize contact with other people while awaiting further medical evaluation.

2. Alert appropriate health-care personnel that an individual from an area with SARS requires evaluation, so that advance preparations can be made to implement infection control procedures to prevent transmission to others during transport and in the health-care setting.

3. Remind the treating health-care provider to notify the local health department if SARS is suspected.

Organizations that are hosting guests from countries affected by SARS may want to have a pre-established physician or medical facility to which suspects are sent for evaluation. Be sure to warn the facility when you are sending a patient to be evaluated so that arrangements can be made to prevent transmission when the person arrives. You can always consult with your local health department if you are not sure whether to send someone for medical care.

For additional information and guidance for institutions or organizations hosting persons arriving in the United States from areas with SARS go to http://www.cdc.gov/ncidod/sars/hostingarrivals.htm.

## Appendix G:
## SARS Template Article

### Severe Acute Respiratory Syndrome (SARS): What You Need to Know

Severe Acute Respiratory Syndrome (SARS) is believed to be a viral infection of the lungs and upper respiratory system. According to the Centers for Disease Control and Prevention (CDC) and other experts around the world, the cause is probably a newly identified coronavirus.

The CDC issued a health alert to clinicians and hospitals on March 15, 2003 upon learning of several cases of SARS reported in Canada among travelers who recently returned from Southeast Asia, and their family members. Since that time, public health officials and the medical community in Virginia have worked together to quickly identify suspected cases of SARS and prevent the spread of the disease.

Usually, SARS begins with a fever and sometimes chills, headache, body aches and mild respiratory symptoms. After 2 to 7 days, SARS patients may develop a dry cough and have trouble breathing. It is important to remember that these symptoms alone do not indicate someone has SARS. Recent travel history to a country with community spread of SARS, or close contact with someone known or suspected to have SARS must accompany the symptoms.

Most cases of SARS have involved people who cared for or lived with someone with SARS, or had direct contact with infectious material (for example, respiratory secretions) from a person who has SARS. SARS is mainly transmitted by inhalation of respiratory droplets (from coughs and sneezes of infected persons) and possibly more broadly through the air or by touching objects that are contaminated. In the United States, the majority of SARS cases are persons who were in one of the countries for which there is a SARS travel alert or advisory (see CDC website); a few household contacts and health care workers have also been infected, but there has been no spread beyond that.

All of the cases of SARS in Virginia have occurred among travelers returning to the United States from parts of the world that a have designated SARS travel alert or advisory status. There have been no cases as a result of spread to close contacts such as family members and health care workers in the state. Currently, there is no evidence that SARS is spreading more widely in the community in the United States

In accordance with guidance from the CDC, the **(LOCAL HEALTH DEPARTMENT)** advises that people planning elective or nonessential travel to mainland China and Hong Kong or Taiwan may consider postponing their trips until further notice. U.S. travelers to Toronto, Canada, Singapore and Hanoi, Vietnam are also recommended to observe precautions to safeguard their health. However, these locations change frequently so travelers should check the CDC website or call their local health department to find out the status of the country they wish to visit.

CDC advises travelers in SARS-affected areas to wash their hands frequently to protect against SARS infection. In addition, CDC suggests that travelers may wish to avoid close contact with crowds as much as possible to minimize the possibility of infection. CDC does not recommend the routine use of masks or other personal protective equipment while in public

areas.

People with symptoms of SARS and recent travel history to a country with a SARS travel alert or advisory have been informed of their risk and advised to consult a health-care provider. To help the health-care provider make a diagnosis, they should tell the provider about any recent travel to places where SARS has been reported or whether there was contact with someone from those areas who had these symptoms.

Although there does not appear to be any risk to the general public of contracting SARS in Virginia, it is always a good idea to practice good hygiene, including frequent and thorough hand washing. Always wash hands after covering mouth and nose when sneezing and coughing, after discarding soiled tissues and after contact with others.

Information about SARS continues to change frequently. For the most recent information, contact (**LOCAL HEALTH DEPARTMENT)** or visit the Virginia Department of Health's website at www.vdh.state.va.us.

**Appendix H:**
**ASTHO / NACCHO SARS Checklist**

ASTHO
ASSOCIATION OF STATE AND TERRITORIAL HEALTH OFFICIALS

NACCHO NATIONAL ASSOCIATION OF COUNTY & CITY HEALTH OFFICIALS

# STATE AND LOCAL HEALTH OFFICIAL EPIDEMIC SARS CHECKLIST

## Are You and Your Jurisdiction Ready for Epidemic Severe Acute Respiratory Syndrome (SARS)?

This checklist, developed in collaboration with the Centers for Disease Control and Prevention, has been modeled on a previous Association of State and Territorial Health Officials (ASTHO) checklist for pandemic influenza preparedness (*Preparedness Planning for State Health Officials: Nature's Terrorist Attack - Pandemic Influenza* is available at www.astho.org/pubs/PandemicInfluenza.pdf). Preparations made to respond to other public health emergencies, including bioterror events, will generally be applicable to epidemic SARS planning.

The items on this checklist are intended for use by health officers at all levels – state, regional, district and local. The division of responsibilities between state and local levels varies among states, and often within states, according to the size of the population served by local health agencies. The items on this checklist should be interpreted in the context of the responsibilities of your public health agency and the division of responsibilities within your community, regardless of level of government. For some local public health agencies, for example, the capabilities needed for certain items may be available from a state health department, but are not present locally.

Every locality should plan for the possibility of a local public health crisis such as widespread SARS, in which help from other public health agencies is not available because they are facing similar crises. At the same time, there are advantages to coordinating response plans on a regional and statewide basis, partly so that isolation and quarantine procedures are applied uniformly and equitably.

SARS would be considered to be widespread in the United States if and when cases occur throughout the nation, in multiple locations, in persons without known epidemiologic links to places with community transmission of SARS or to known SARS cases. Local, district, and state public health agencies should be prepared to address all of the following items when the disease is present elsewhere in the world and to implement those preparations when widespread disease occurs in the United States.

## LEGAL AND POLICY ISSUES

LEGAL AND POLICY ISSUES

❑ 1. My jurisdiction has a draft or formally adopted epidemic SARS plan.

❑ 2. Agreements have been obtained with my state's health care insurers, Medicaid program, and healthcare product and service providers for cooperation with public health recommendations during an epidemic.

- ❑ 3. I have reviewed with legal counsel my jurisdiction's laws and procedures on quarantine, isolation, closing premises and suspending public meetings and know how to implement them to help control an epidemic.

- ❑ 4. I am familiar with my state's medical volunteer licensure, liability, and compensation laws for in-state, out-of-state, returning retired, and non-medical volunteers.

- ❑ 5. I know whether my state allows hospitals and other licensed healthcare institutions to use temporary facilities for provision of medical care in the event of a public health emergency.

- ❑ 6. My jurisdiction's epidemic plan addresses Worker's Compensation and Unemployment Compensation issues related to health care and other workers missing work because of isolation or quarantine.

- ❑ 7. I have identified any deficiencies in my jurisdiction's laws and procedures on quarantine, isolation and related capacities and initiated steps to have those deficiencies corrected.

- ❑ 8. I know what provisions are in place, if any, for compensation of persons with economic or health injury resulting from needed SARS control measures and for limitation of liability of health care providers and agencies.

## AUTHORITY

- ❑ 9. My state has an executive SARS epidemic planning committee that oversees the planning process, in cooperation with local health agencies.

- ❑ 10. My state has identified the authority responsible for declaration of a public health emergency and for officially activating our plan during a SARS epidemic.

- ❑ 11. My jurisdiction has identified key stakeholders responsible for development and implementation of specific components of the SARS epidemic plan, including enforcement of isolation, quarantine, and closure and decontamination of premises.

- ❑ 12. My jurisdiction's elected officials, appointed officials, and other agency heads know their respective responsibilities in the event of an epidemic.

- ❑ 13. My jurisdiction has a command system in place (e.g., the Incident Command System) to govern roles and responsibilities during a multi-agency, multi-jurisdictional event.

- ❑ 14. I am familiar with the controlling authority over intrastate and interstate modes of transportation, should these need to be curtailed during an epidemic (e.g., airplanes, trains, ships, highways).

- ❑ 15. My staff has relationships with health authorities of adjoining counties or states and with federal agencies to ensure effective communication during a public health emergency.

- ❑ 16. My jurisdiction has identified an overall authority in charge of coordinating different medical personnel groups during an epidemic.

- ❑ 17. I know personally the key individuals from the state and local authorities who will assist in maintaining public order and enforcing control measures, if needed, during an epidemic.

❑ 18. I am familiar with the procedure for enlisting the National Guard's assistance during a public health emergency.

## SURGE CAPACITY

❑ 19. I know how to access current recommendations on treatment of cases and prevention of transmission in the hospital, long-term care and home care settings.

❑ 20. My jurisdiction's emergency response planning has involved health care product and service providers to determine how to best prevent and control disease spread and manage the health care of the population during an epidemic.

❑ 21. I am familiar with the required protocol for securing needed emergency healthcare services and supplies during a public health emergency.

❑ 22. My jurisdiction has identified ways to augment medical, nursing, and other health care staffing to maintain appropriate standards of care during an epidemic.

❑ 23. My jurisdiction has identified ways to augment public health laboratory, epidemiology and disease control staffing to meet emergency needs and in the event public health workers are affected by an epidemic.

❑ 24. My jurisdiction has a process to recruit and train medical volunteers for provision of care and vaccine administration during a public health emergency.

❑ 25. My jurisdiction has identified alternate facilities where overflow cases from hospitals and well persons needing quarantine away from home can be cared for and has developed processes with Emergency Medical Services to assess, communicate, and direct patients to available beds.

❑ 26. My jurisdiction has identified facilities for outpatient and inpatient care of children with SARS and their families.

❑ 27. My jurisdiction's epidemic plan addresses the mechanics of how isolation and quarantine will be carried out, such as providing support services for people who are isolated or quarantined to their homes or temporary infirmary facilities and protection for workers providing these services.

❑ 28. My jurisdiction has a plan for ensuring that appropriate personal protective equipment, including N-95 or higher level respirators, is made available for persons whose job requires exposure to people with SARS, and that needed training and fit-testing are provided.

❑ 29. My jurisdiction has a plan for dealing with mass mortality, including transportation and burial of bodies.

❑ 30. My jurisdiction has a plan for providing mental health services to mitigate the impact of a SARS epidemic.

## COMMUNICATIONS AND EDUCATION

❑ 31. I have conveyed the importance of epidemic preparedness, and its overlap with bioterrorism preparedness, to my jurisdiction's chief executive and to other state and local law and policy

makers.

- ❑ 32. I know personally the key individuals from public health agencies, the medical community, and the political community with whom I will need to communicate during an epidemic.

- ❑ 33. My jurisdiction has begun educating the public on epidemic SARS to instill acceptance of the epidemic response (including quarantine and isolation) and to optimize public assistance during an epidemic.

- ❑ 34. My jurisdiction has opened a regular channel of communication and begun educating health care providers (including first responders) and their organizations and unions on epidemic SARS (including diagnosis, treatment, and management of cases and contacts to prevent transmission).

- ❑ 35. My jurisdiction has opened a regular channel of communication and begun educating chief executive officers of health care organizations on epidemic SARS (including management of patients in health care settings, health care worker protection, physical facility needs, voluntary or forced furloughs of exposed workers, etc.).

- ❑ 36. My jurisdiction has established a multi-component communications network and plan for sharing of timely and accurate information among public health and other officials, medical providers, first responders, the media and the general public.

- ❑ 37. My jurisdiction has begun identifying and planning to produce and provide education and information materials for media, providers, the public, and occupational groups whose duties may expose them to SARS, in appropriate languages and in forms suitable for limited literacy populations.

- ❑ 38. Whoever is selected as the primary public spokesperson for my jurisdiction during an epidemic is ready to clearly and consistently answer the following types of questions:

    - ❑ How is the SARS-associated coronavirus (SARS-CoV) transmitted?
    - ❑ How long are people infectious after they have SARS?
    - ❑ What is isolation? What is quarantine?
    - ❑ What is the justification for isolation of cases and quarantine of contacts?
    - ❑ What is the legal authority for isolation of cases and quarantine of contacts?
    - ❑ What is the difference between a probable and a suspected SARS case?
    - ❑ Who should be tested for the SARS-associated coronavirus?
    - ❑ What can members of the public do to protect themselves?
    - ❑ In the event a vaccine or antiviral treatment become available, what specific priority groups might be vaccinated or treated first?

- ❑ 39. My jurisdiction has identified the most effective media to get messages out to the public during an epidemic (e.g., TV, radio, print media, internet, Web sites, hotlines).

- ❑ 40. My jurisdiction has planned how to coordinate state, local, and federal public messages and ensure they are consistent and timely.

## LABORATORY AND SURVEILLANCE

- ❑ 41. In the event of a SARS epidemic, I will have available daily counts of key community health indicators, such as numbers of emergency department visits, hospital admissions, deaths,

available hospital beds and staff, facility closings, numbers of contacts being traced and numbers under quarantine.

- ❑ 42. The public health laboratory that serves my jurisdiction can test for the SARS-associated coronavirus by serology and/or PCR.

- ❑ 43. My state has identified those labs that can test for the SARS-associated coronavirus.

- ❑ 44. The public health laboratory that serves my jurisdiction has linked to clinical laboratories and provided training on the use of SARS tests, biosafety, specimen collection, packing and shipping, and rule-out testing.

- ❑ 45. Public health laboratories in my state have computerized record-keeping to help with data transmission, tracking, reporting of results to patients and facilities, and analysis during an epidemic.

- ❑ 46. My jurisdiction has determined how to assess and document the spread and impact of disease throughout the population, including special populations at risk (such as health care workers and first responders), during a SARS epidemic, including enhancements to routine surveillance.

- ❑ 47. My jurisdiction has computerized record-keeping for cases, suspected cases, contacts, and persons under public health isolation or quarantine orders to help with data transmission, tracking and analysis during an epidemic.

- ❑ 48. My jurisdiction's epidemiology staff, in cooperation with other public health agencies, has the capacity to investigate clusters of SARS cases, to determine how disease is being transmitted, to trace and monitor contacts, to implement and monitor quarantine measures, and to determine whether control measures are working.

- ❑ 49. My jurisdiction has plans for educating health care providers about recognition and reporting of SARS, about the current case definition, and about sources of current information on all aspects of SARS.

## PREPAREDNESS IN OTHER AGENCIES

- ❑ 50. The emergency response system is ready to deal with epidemic SARS as called for in an all-hazards or epidemic plan.

- ❑ 51. My jurisdiction has carried out a community-wide epidemic SARS table-top or field exercise, to train on and evaluate its epidemic plan.

- ❑ 52. Community partners such as hospitals, EMS services, law enforcement agencies, health care practitioners, environmental hygiene/remediation services, news media, schools, and colleges know what part they are expected to play during an epidemic and are prepared to do so.

- ❑ 53. The law enforcement and court system in this jurisdiction are prepared to enforce isolation and quarantine orders and to promptly adjudicate appeals to public health orders, as provided by statute.

**Information about SARS is available from the Centers for Disease Control and Prevention at**

**www.cdc.gov/ncidod/sars/**

**Worldwide information about SARS is available from the World Health Organization at**

**www.who.int/csr/sars/en/**

## VACCINATION/ANTIVIRALS

At present (May, 2003), there is neither a vaccine nor effective antiviral chemotherapy available for SARS. The items below will become relevant when one or both of these become available.

- ❑ V1. My jurisdiction has identified the method(s) of epidemic vaccine and antiviral delivery (i.e., public sector, private sector, or a combination of these two) that will be most efficient for the jurisdiction, and developed and tested methods for mass administration.

- ❑ V2. I know whether my state statutes provide for providing or requiring vaccination or treatment during an infectious disease emergency, and know how to implement them in my jurisdiction to help control an epidemic.

- ❑ V3. My jurisdiction has the infrastructure in place to vaccinate or treat at-risk and hard-to-reach populations during a SARS epidemic.

- ❑ V4. My jurisdiction's epidemic plan outlines a process for identifying essential workers (those people whose jobs/skills are critical for maintenance of public safety and an efficient epidemic response) and "highest risk" groups who will need to receive priority vaccination and/or antiviral prophylaxis.

- ❑ V5. My jurisdiction has developed a documentation process for administered epidemic vaccine and antiviral doses, with recall capacity if more than one dose is required to induce immunity.

- ❑ V6. My jurisdiction has determined how adverse vaccine or medication side effects will be documented, in cooperation with local health agencies, during a mass or targeted vaccination or prophylactic treatment campaign.

- ❑ V7. My jurisdiction has compiled a list of health care workers and institutions that will assist in mass vaccination or prophylactic treatment during an epidemic or other public health emergency.

- ❑ V8. My jurisdiction has identified ways to secure and protect a limited supply of essential medicines, supplies, equipment and vaccines.

- ❑ V9. My jurisdiction has developed and tested, through a simulated exercise, a plan for mass or targeted immunization, prophylactic treatment, and clinical care including: accepting delivery of large quantities of vaccine, drugs, supplies or equipment (e.g., as part of the Strategic National

Stockpile); storing and handling vaccine, drugs, supplies or equipment; setting up and staffing clinics; administering vaccine or antiviral drugs; and educating the public, media, and medical providers.

## Appendix I:
## Definition of Common Acronyms Used in SARS Planning

| | |
|---|---|
| CDC | Centers For Disease Control and Prevention |
| DCEPR | Deputy Commissioner for Emergency Preparedness and Response |
| DCLS | Division of Consolidated Laboratory Services |
| DEM | Department of Emergency Management |
| DSI | Division of Surveillance and Investigation |
| EIA | Enzyme Immunoassay |
| EPI | Office of Epidemiology |
| EOC | Emergency Operations Center |
| FAQ | Frequently Asked Questions |
| FDA | Food and Drug Administration |
| JCAHO | Joint Commission on Accreditation of Healthcare Organizations |
| LHD | Local Health Department |
| NCR | National Capital Region |
| NVHEC | Northern Virginia Health Education Center |
| PIC | Department of Emergency Management Public Inquiry Center |
| PIO | Public Information Officer |
| PR | Public Relations |
| RICCS | Regional Incident Communication and Coordination System |
| RT-PCR | Reverse-Transcription Polymerase Chain Reaction |
| SARS | Severe Acute Respiratory Syndrome |
| SARS-CoV | SARS-associated Coronavirus |
| SNS | Strategic National Stockpile |
| VDH | Virginia Department of Health |
| WHO | World Health Organization |